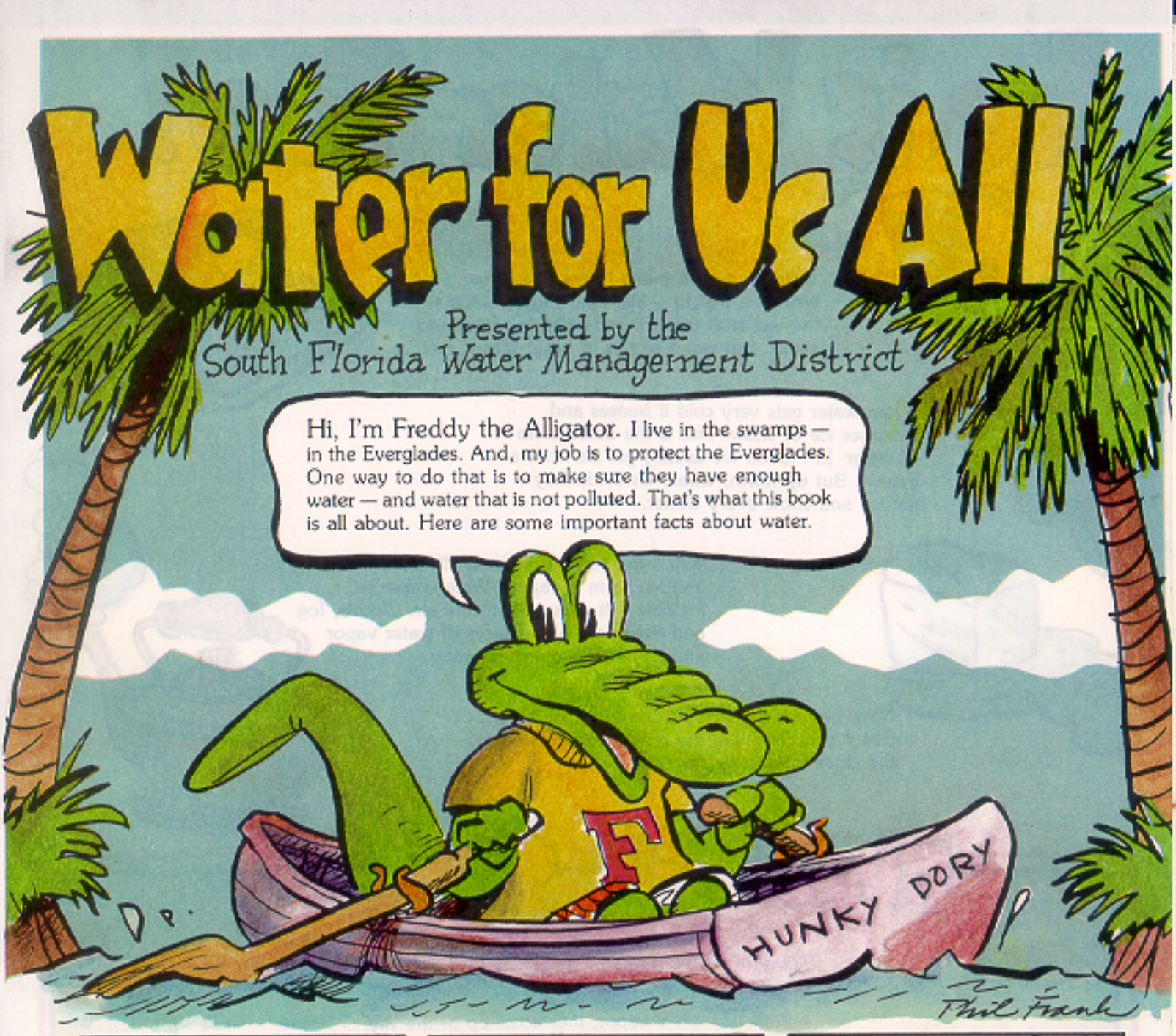
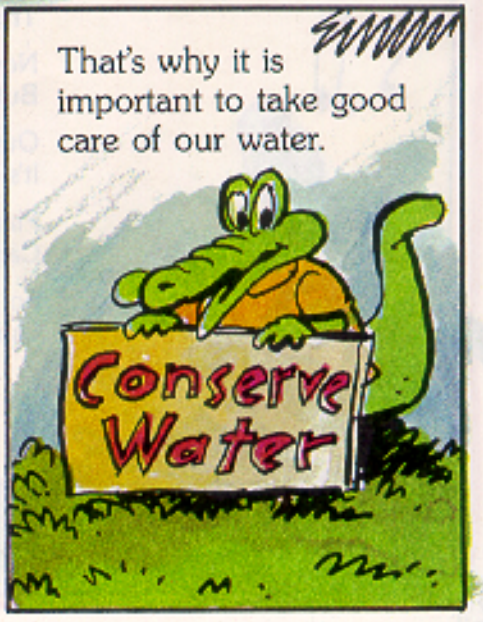
Water for Us All

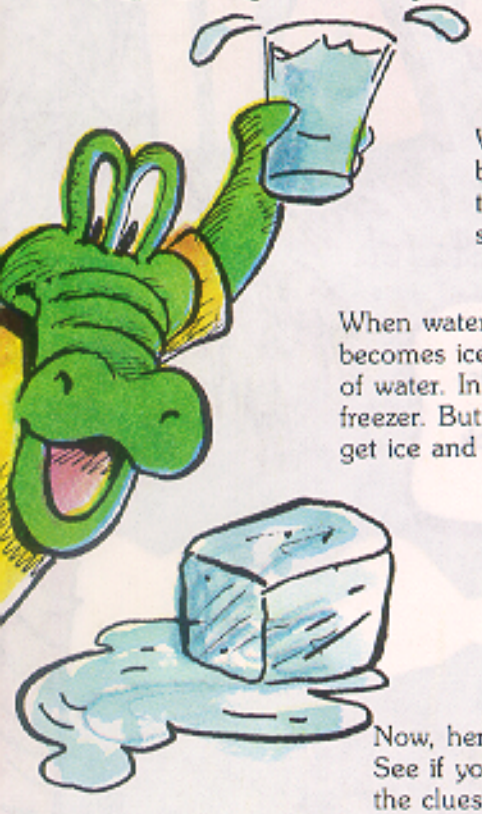
Presented by the
South Florida Water Management District

Hi, I'm Freddy the Alligator. I live in the swamps — in the Everglades. And, my job is to protect the Everglades. One way to do that is to make sure they have enough water — and water that is not polluted. That's what this book is all about. Here are some important facts about water.





Ice is Water Too!



Water comes in many forms. We know it best as a **liquid** — like rain. Liquid water is the wet stuff that we can swim in, drink and squirt. But water comes in other forms, too.

When water gets very cold it freezes and becomes ice or snow. This is the **solid** form of water. In Florida we usually get ice from a freezer. But up north, where it's cold, they get ice and snow every winter.

When the sun warms water it turns into another form — **vapor.** Water vapor is invisible — it rises up into the air. Clouds, fog and steam are all mixtures of water vapor and tiny little droplets of water.

Now, here's a song about the forms of water. See if you can fill in the missing words from the clues in each verse.

Freddy's Song

There are three forms of water, because that's nature's way.
And somewhere on our planet there is each form today

Sometimes it is a vapor, that floats up in the sky,
Those fluffy clouds above you are _____ way up high.

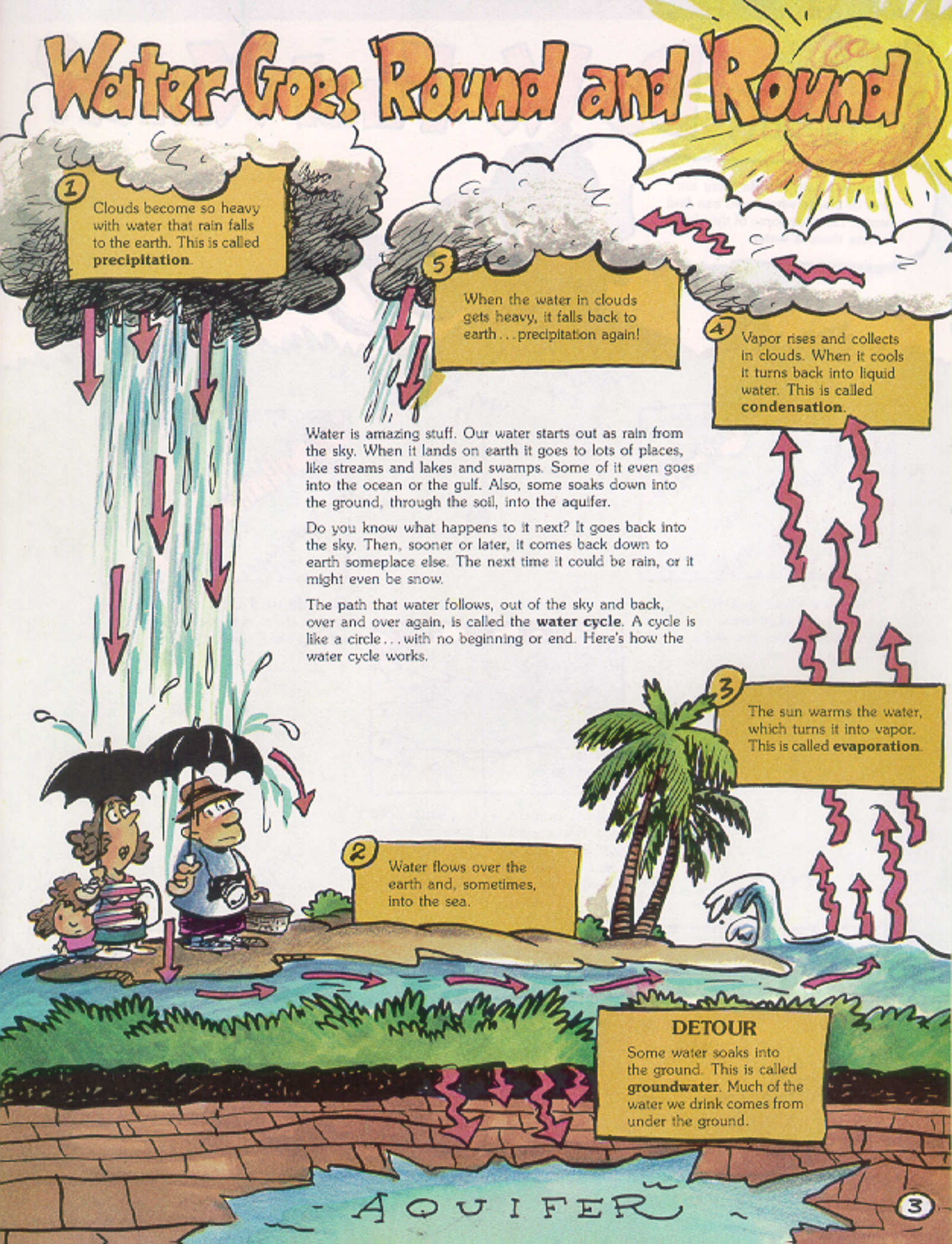
Now, ice and snow are _____, that won't run through your hands.
But Florida is one place a snowflake seldom lands.

Our favorite form of water is _____ that we drink.
It's great to use for washing, in tubs and in the sink.

Plants, birds and alligators, all other creatures, too,
Can't live without their water, in that they're just like you.

So just remember one thing, a fact that must be faced...
Our water's very precious — there's not enough to waste.

Water Goes Round and Round

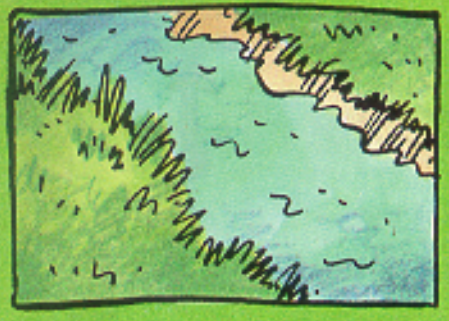


Water is amazing stuff. Our water starts out as rain from the sky. When it lands on earth it goes to lots of places, like streams and lakes and swamps. Some of it even goes into the ocean or the gulf. Also, some soaks down into the ground, through the soil, into the aquifer.

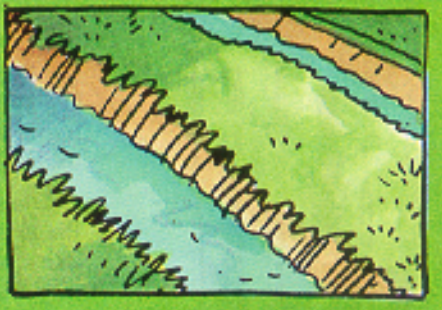
Do you know what happens to it next? It goes back into the sky. Then, sooner or later, it comes back down to earth someplace else. The next time it could be rain, or it might even be snow.

The path that water follows, out of the sky and back, over and over again, is called the **water cycle**. A cycle is like a circle . . . with no beginning or end. Here's how the water cycle works.

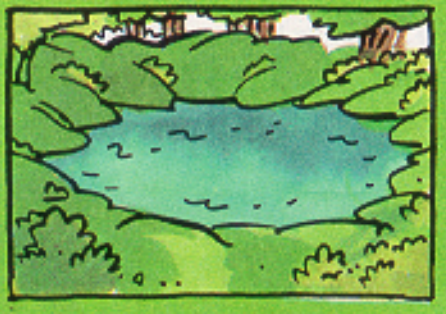
Where Do We Find Water?



Streams: Creeks and rivers are two kinds of streams. Water moves from one place to another in streams.

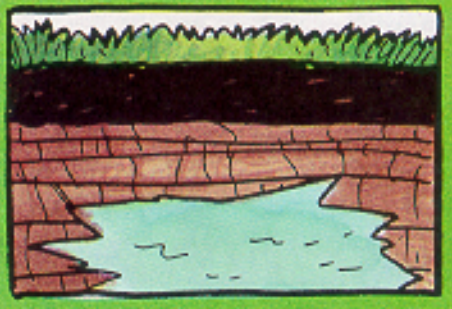


Canals and Ditches: Canals and ditches are man-made streams for moving water — also called channels.

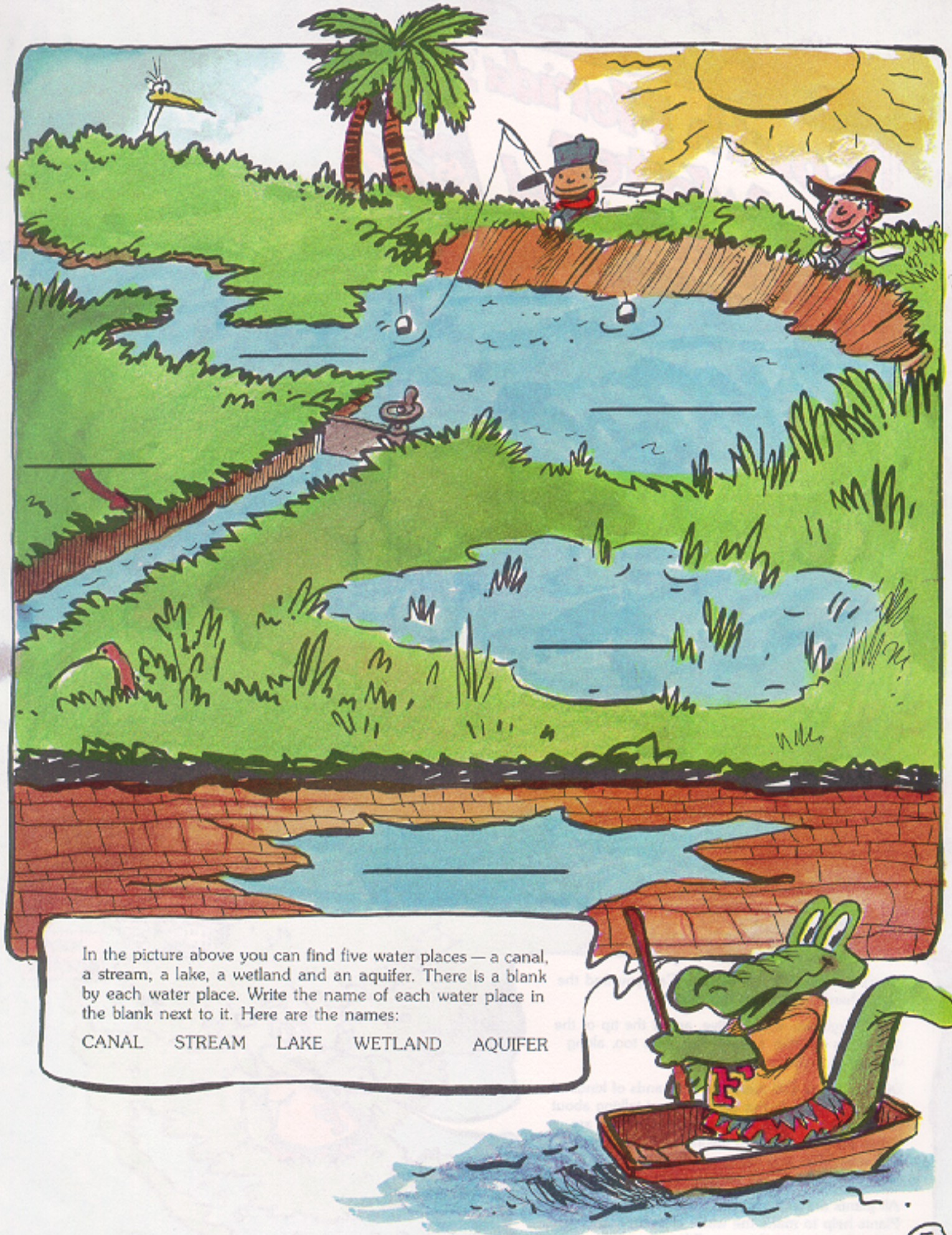


Lakes: A lake is a place surrounded by land where a lot of water collects — like Lake Okeechobee. Some of the water in Lake Okeechobee comes from streams like the Kissimmee River. A pond is a small lake.

Wetlands: Places like marshes or swamps are called wetlands. These are places where some of the land is underwater for at least part of every year. The Everglades are wetlands.

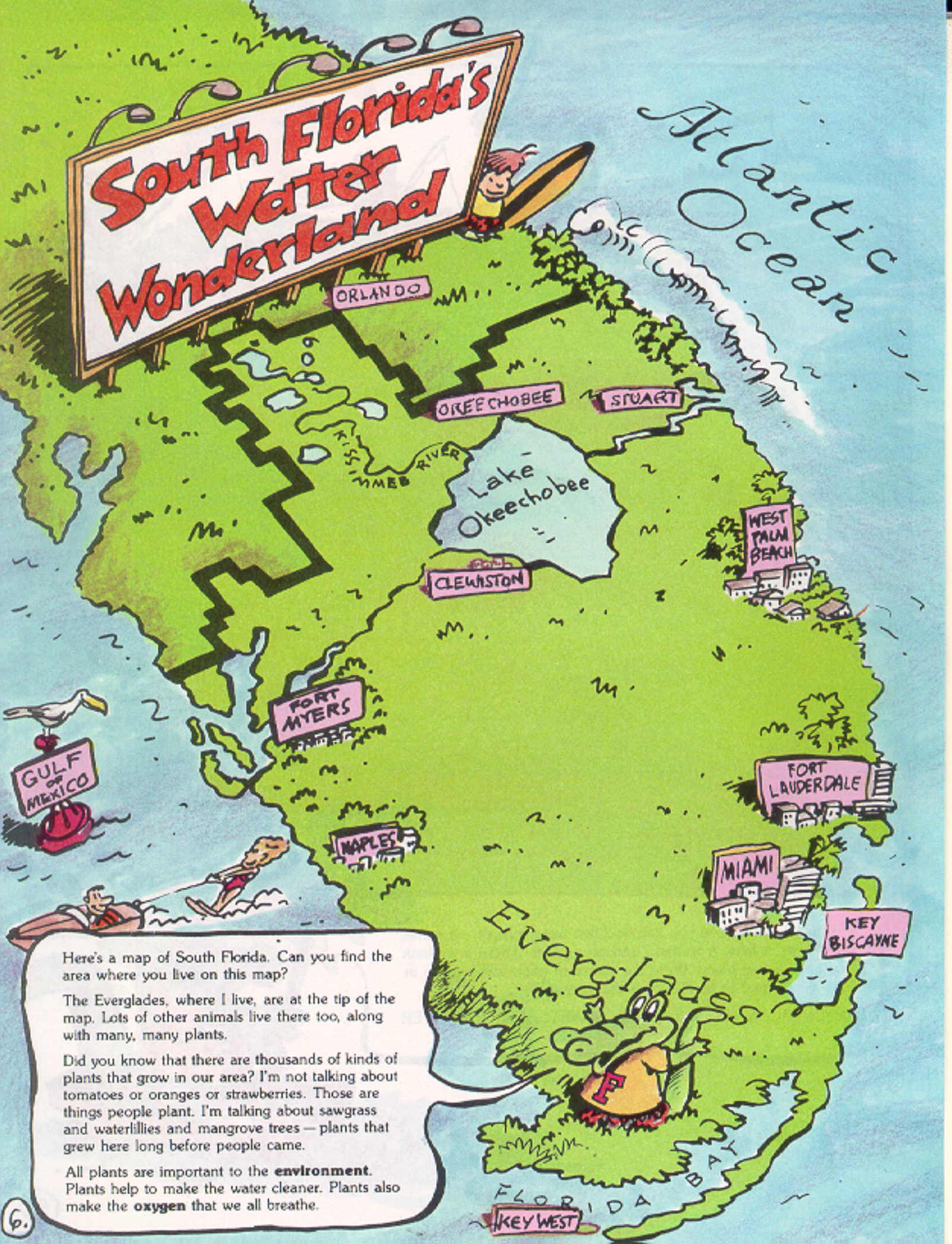


Aquifers: Some water soaks into the ground. It collects in underground rock formations called aquifers. A lot of the water that soaks into the ground comes from wetlands.



In the picture above you can find five water places — a canal, a stream, a lake, a wetland and an aquifer. There is a blank by each water place. Write the name of each water place in the blank next to it. Here are the names:

CANAL STREAM LAKE WETLAND AQUIFER



Here's a map of South Florida. Can you find the area where you live on this map?

The Everglades, where I live, are at the tip of the map. Lots of other animals live there too, along with many, many plants.

Did you know that there are thousands of kinds of plants that grow in our area? I'm not talking about tomatoes or oranges or strawberries. Those are things people plant. I'm talking about sawgrass and waterlillies and mangrove trees — plants that grew here long before people came.

All plants are important to the **environment**. Plants help to make the water cleaner. Plants also make the **oxygen** that we all breathe.

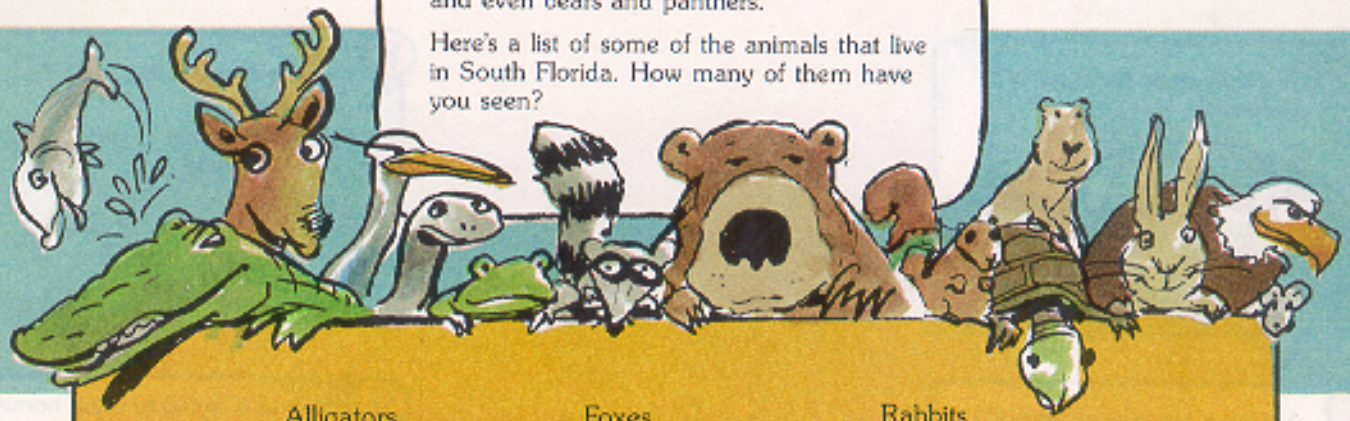
Here are some of the plants that have been here for thousands of years.

TREES	WATER PLANTS	GRASSES	BUSHES
Live oaks	Bullrushes	Needlegrass	Gallberries
Mangroves	Cattails	Saw grass	Palmettos
Pines	Waterlillies	Wire cordgrass	Wax Myrtle
Palms			Willows
Magnolias			

And all these different kinds of plants are important to the animals that live here. Some plants give food to us animals that live in the fields and wetlands. Some plants give us places to hide. And some plants give us building materials and places for nests.

What kinds of animals am I talking about? Well, not just us alligators, but fish and birds and even bears and panthers.

Here's a list of some of the animals that live in South Florida. How many of them have you seen?



Alligators	Foxes	Rabbits
Armadillos	Frogs	Raccoons
Bears	Hawks	Wood Storks
Bobcats	Herons	Snakes
Cranes	Lizards	Sparrows
Deer	Mink	Squirrels
Eagles	Otters	Tortoises
Fish	Opossums	Turtles

Do you know why I'm talking about plants and animals in a book about water? Well, like I said before, all of us creatures need water and plants to live — just like people!

Many Uses For The River

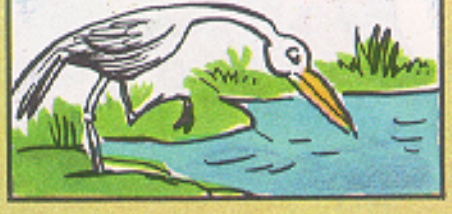
Animals and people need water for many of the same uses. Both animals and people drink it. Both of them swim in it. Both get food from it. And both use it to move things around.

Study the four scenes and descriptions on the left below. They all are about animals using the water in a river. Next, look at the four scenes and descriptions on the right below. They all are about people using the water in the same river.

Draw a line between each of the matching human and animal uses.

A. Freddy enjoys a little snack.

B. A heron stops for a sip of water.

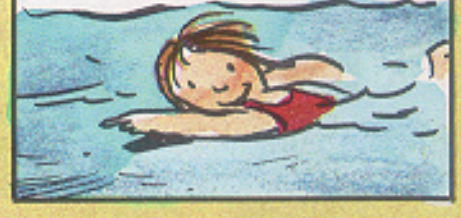


C. A beaver brings a log to build his home.

D. All kinds of fish swim in this river.

E. After hiking all morning, Jack really needed a cool drink.

F. Cathy loves taking a dip in the river.



G. Jaime is trying to bring home dinner for his family.

H. Sally rows her boat to the other side of the river.


Water for People
People use water to do many things. How many ways can you count people using water in the picture below? Can you think of other ways that we use water?
See if you can find a **well** in the picture. People use wells to pump water out of the ground. Water from wells is groundwater. That is where most of the water we use comes from.
Between drinking, washing, cooking and watering, each person in South Florida uses about 200 gallons of water every day.
INSURANCE

How to Save Water

In this book we've learned how important water is. Plants, animals and people all must have water to live. Without water our planet Earth would be like Mars — nothing could live here.

You may have heard people talk about how fast Florida is growing. They don't mean the size of Florida is growing. What they mean is there are more people in Florida. There are more people in the same amount of space. And we still have the same amount of water.

What that means is that with more people, there is less water to go around.

Here are some ways you can help save water.

Turn off the faucet when you brush your teeth or wash your hands. If you brush or wash for two minutes you use 6 gallons. Turn off the water while you scrub and you use one gallon. You save **5 gallons.**

Take shorter showers. Every minute you spend in the shower you use about 5 gallons. Spend 3 minutes less in the shower. You save **15 gallons.**

Don't use toilets as wastebaskets. Every flush uses about 5 gallons. Throw tissues and bugs in the waste basket. You save **5 gallons.**

Keep water in the refrigerator. If you run water in the sink until it gets cold, that's water down the drain. You save **3 gallons.**

Turn off the hose when you're not using the water to wash a car, fill a pool or water the yard. Five minutes of wasting water from a hose uses about 40 gallons. Don't be a gutter flooder. You save **40 gallons.**

Here are a few more water-saving tips for your family.

- Get an adult to help you fix dripping faucets indoors and outside.
- Water the garden only when it needs it — not more than once a week in the winter.
- Remind your parents to wash full loads of laundry and dishes.
- Make sure your family uses cold water for cooking instead of waiting for it to get hot from the faucet.
- Also tell your parents to be sure your lawn sprinklers don't spray onto sidewalks, streets or driveways.

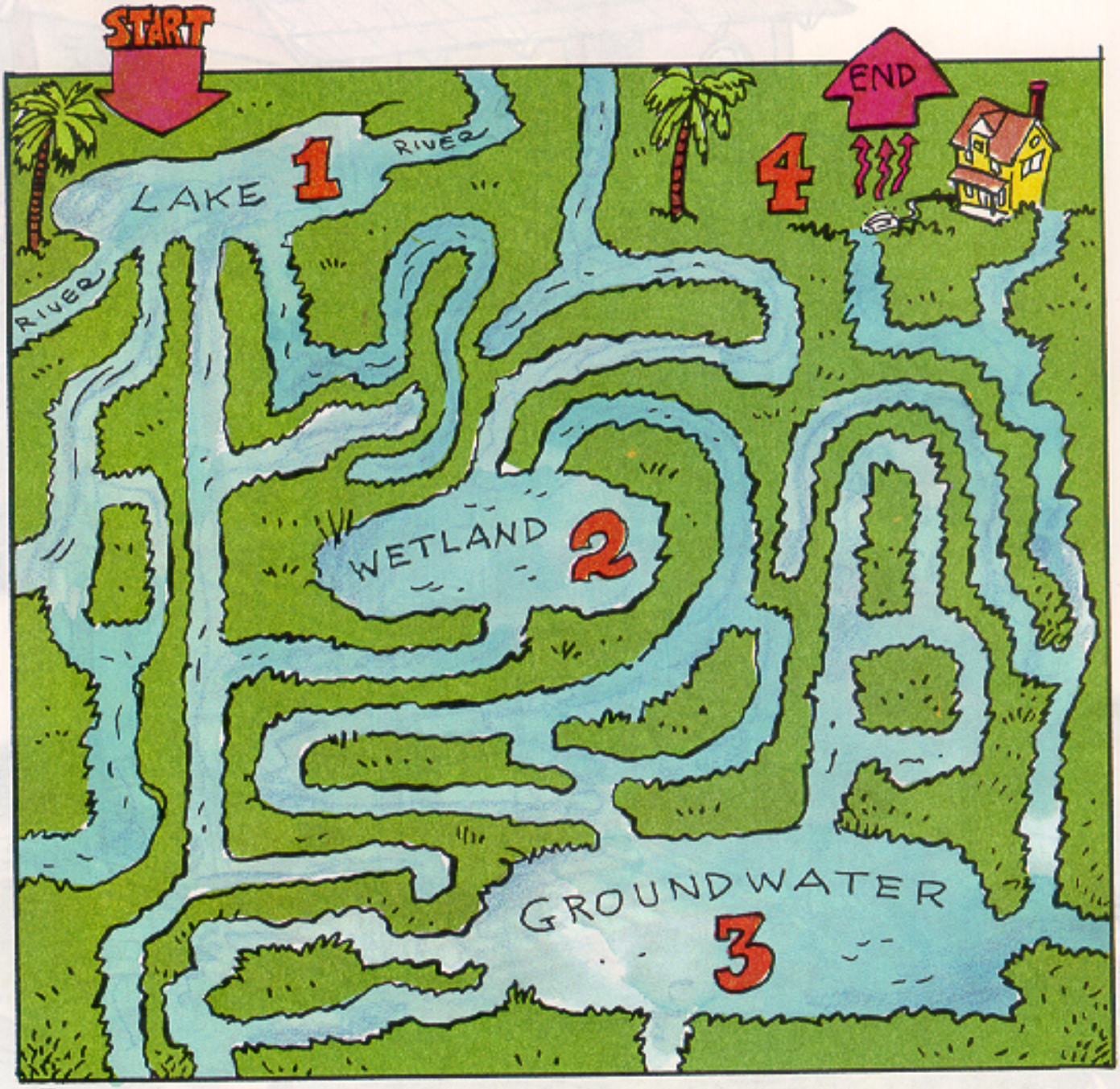
The O'Guzzlers

Here's the O'Guzzlers family — Glugg, Gushy and the little squirts. They don't know about saving water, but you can help. Find all the ways they're wasting water in this picture. Draw a circle around each place there's waste. Maybe they'll catch on and start saving.

Amazing Water

Water is amazing stuff. It comes in many forms. It is always on the move — it keeps coming back. And **NOTHING** can live without it.

Here is an amazing puzzle. See if you can follow the water through its cycle. Start with the rain falling into the LAKE (1). Next, it flows through a RIVER to the WETLAND (2). From the wetland, it goes into GROUNDWATER (3). A WELL draws it up to the house where it is used to water the LAWN(4). Finally, it evaporates back into the air and you've reached the END of the maze. Congratulations.



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